206.2 Electrical Resistivity and Conductivity of Silicon (block and wafer forms)

SRMs 2541 through 2547 consist of single wafers intended for use as reference standards for sheet resistance and resistivity measurements utilizing the four-point probe method. SRMs 2541, 2542, and 2543 are made of Czochralski-grown, boron-doped silicon with (100) crystallographic orientation; SRMs 2544, 2545, 2546, and 2547 are float zone (111) orientation and phosphorus-doped by the neutron transmutation doping process.

SRM 2524 Optical Fiber Chromatic Dispersion Standard has been discontinued. Special-test chromatic-dispersion measurements can be arranged, for interested customers. Contact Tasshi Dennis at tasshi@boulder.nist.gov.

SRM 2525 Optical Retardance Standard has been discontinued. Special-test optical-retardance measurements can be arranged, for interested customers. Contact Paul Williams at pwilliams@boulder.nist.gov.

For further information see SP 260-131; 1999 Ed.

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PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	Description	Resistivity ($\Omega \cdot$ cm)	Unit Size (mm)
2524	Optical Fiber Chromatic Dispersion	Discontinued	
2541	Silicon Resistivity	0.01	100D $\times$ 0.625
2542	Silicon Resistivity	0.1	100D $\times$ 0.625
2543	Silicon Resistivity	1	100D $\times$ 0.625
2544	Silicon Resistivity	10	100D $\times$ 0.625
2545	Silicon Resistivity	25	100D $\times$ 0.625
2546	Silicon Resistivity	100	100D $\times$ 0.625
2547	Silicon Resistivity	200	100D $\times$ 0.625